CERCLA

Pre-Cerclis Screening Action

Illinois Environmental Protection Agency

SIGNATURE PAGE

Title: Pre-CERCLIS Inspection for Loewenthal Metals Corp

EPA ID: ILP000510081

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9/6/06
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Laura J. Ripley
Signature

9/27/2006
Date

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PRE-CERCLIS SCREENING ASSESSMENT

For:

Loewenthal Metals Corp.
947 W. Cullerton Street, Chicago, Illinois

Prepared by:
Illinois Environmental Protection Agency
Bureau of Land
Office of Site Evaluation

August 31, 2006

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Section 1.0 Introduction

On September 29, 2003, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation (OSE) was asked by United States Environmental Protection Agency (U.S. EPA) Region V to conduct a Pre-CERCLIS Screening Assessment (PCS) at the property which has historically been occupied by Loewenthal Metals Corp. site in Chicago, Illinois. The property is located at 947 W. Cullerton Street (N 41° 51'.310 and W 87° 39.006). The PCS is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund.

A Pre-CERCLIS Screening is a review of information on potential Superfund sites to determine whether the site should be entered into EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS). If there is sufficient information that suggests the site may be impacting human health and the environment, the site will be placed in CERCLIS and will progress through the Superfund investigative process.

The Illinois EPA conducted the Pre-CERCLIS Screening on the Loewenthal Metals Corp. as a result of a request from the Region V offices of the United States Environmental Protection Agency.

Section 2.0 Site Background

Section 2.1 Site Description

Loewenthal Metals Corp. is located at 947 W. Cullerton Street in Chicago, Illinois. The site also has an address of 2006 S. Sangamon Street, Chicago, Illinois. The site is located at latitude 41° 51' 19" N and longitude 87° 39' 0.6" W. The site can also be found in the United States Geological Survey Topographical Maps in Illinois from the Englewood Quadrangle, T 39 N, R 14 E, Section 20. The physical setting of the site is primarily residential. The 0.42 acre site is partially vegetated with weeds and the southern quarter of the site has a few trees. A concrete foundation is located on the southern portion of the site. The Cook County Assessors Office has assigned 17-20-433-003-000 as the Property Index Number (PIN) for the address of 2006 S. Sangamon Street which is the same as 947 W. Cullerton Street. Upon viewing the historical 1939 – 1941 aerial photos, it appears as though there was a building which covered most of the site. There is also evidence of a railroad spur which ran on the property.

In the 1940 Standard Metal Directory, Loewenthal Metal Corp. is listed under aluminum, antimonial lead, and zinc smelters, as well as under Babbitt and solder manufacturer, and ingot metal and scrap metal dealer. The company is also listed in the *1948-49 Standard Metal Directory* under Aluminum and Battery Lead Smelter, and Scrap Iron and Metal Dealers, as well as Importers and Exporters of Scrap Metal.

The site is undeveloped without a sidewalk. The absence of the sidewalk and the appearance of the sparsely vegetated vacant lot prompted a follow-up investigation of the site. Upon review of the surrounding area it was observed that children and adults were walking along the perimeter of the site near Cullerton Street in order to get to the school located further east on Cullerton (photos 4 and 5, page 12 and 13). With the high volume of individuals in the area utilizing the edge of the site for foot traffic, it was a concern

that these individuals may be exposed themselves to elevated inorganics associated with past operations at the site.

Surface water drainage of the site was not determined. The site is flat with no observable surface water drainage.

Drinking water in the area is obtained from Lake Michigan.

There is a residential apartment complex located directly to the west of the site (photo 1, page 11), with residential homes found adjacent (north) of the site (photos 6, 7 and 8, page 14 and 15). Rail road tracks are present on the east side of the site, followed by residential homes (photo 4, page 13).

Section 3.0 Current Site Status/Field Inspection Activities

A reconnaissance trip was taken on July 15, 2006 to verify the conditions and locations of the former Loewenthal Metals Corporation. The site is presently an empty lot with a concrete platform in the southern portion of the site. There is also evidence of open dumping on the property (photo 10, page 16). A new residential complex has recently been built just west of the vacant lot (photo 1, page 13). To the east of the lot are railroad tracks followed by residential homes. The site is partially vegetated with exposed gravel and soil. Upon arriving at the site, it was determined that the southern edge of the property is being used for a walkway for children to and from school. There is not a sidewalk on the edge of this property. The presence of a tent/home-made structure near the south portion of the site indicated that the site is also being utilized by transient individuals.

During the July 15th site inspection, a Niton X-Ray Fluorescence (XRF) analyzer was utilized to collect inorganic data to determine if any potential hazards can be associated with past operations of the lead smelter. Twelve XRF readings were collected from random locations (Figure 2). These readings revealed elevated levels of arsenic, lead, copper, manganese and zinc. These contaminants were found to be in excess of three times the background limits. Lead was found in excess of 400 parts per million (ppm). There are no established Removal Action Levels for lead. Many times if lead exceeds 400 ppm (set forth in Tiered Approach to Corrective Action Objectives, Tier I Values) then these areas are subject to removal actions. Background limits were established using *A Summary of Selected Background Conditions for Inorganics in Soil* (Ref. 8). These XRF readings are documented in Table 1.

Section 3.2 Analytical Data

XRF readings were collected in various areas of the site (Fig 2). These readings were collected to determine if inorganic contamination was present in the surface soils of the site. Surface soils with contamination could affect the individuals utilizing the area for possible recreational purposes and also pedestrians using the area as a sidewalk.

Results from the XRF readings revealed a number of locations that exceeded three times the background levels for lead, arsenic, copper, manganese and zinc. For arsenic, XRF 15 was the only location that exceeded three times the background levels. Lead results revealed XRF 5, 8-11, and 13-16 above three times the background levels. Copper was elevated in XRF 13-16. Manganese results revealed only XRF 7 being

elevated. Three times the background level of zinc was found in XRF 7, 9-11 and 13-16. A table of the XRF results can be found in Table 1.

Section 4.0 Migration Pathways

Section 4.1 Soil Exposure

Exposure to the on-site soils is possible. Inorganics discovered in the surface soils of the site could come into contact with adults and children in the area. Inhalation and ingestion of these contaminants is possible. Since this site is in a residential area, the possibility of the exposure is high. The risk associated with the individual utilizing the site as a place of residence is high.

Section 4.2 Ground Water Exposure

The ground water pathway was not assessed due to the residents of the Chicago area deriving their drinking water from Lake Michigan and ground water from this site would not impact this pathway.

Section 4.3 Surface Water Exposure

The surface water pathway was not assessed due to the surface water drainage from the site would percolate through the soils of the site. If a large amount of rain water were present, then the excess water from the site would be diverted to the culverts located on Cullerton Street.

Section 4.4 Air Migration

Air samples were not collected during the screening process. Upon assessing the air pathway, it was determined that the air pathway did not pose a threat to the surrounding population..

Section 5.0 References

1. Cook County Assessor's Office, http://www.cookcountyassessor.com/filings/gis.asp

2. Illinois Environmental Protection Agency, http://www.epa.state.il.us

3. U.S. Environmental Protection Agency, http://www.epa.gov/superfund/sites/cursites/index.htm

4. Standard Metal Directory, Eighth Edition 1940, Atlas Publishing Company, 150 Lafayette St., New York, Copyright 1939.

5. Standard Metal Directory, Eleventh Edition 1948, Bardeen Press, Inc., Atlas Publishing Co., Copyright 1948.

6. Standard Metal Directory, 1963-1964 Volume XVIII, by Geoffrey J. Nightingale, Copyright 1963, by Standard Metal Directory 525 W. 42nd Street, New York 36, N.Y.

7. Yahoo-USA, http://maps.yahoo.com/

8. Illinois Environmental Protection Agency. (1994). *A Summary of Selected Background Conditions for Inorganics in Soil.* Office of Chemical Safety. Illinois Environmental Protection Agency, Springfield, Illinois.

Table 1
XRF Results

Contaminants	Background Concentrations	XRF 4	XRF 5	XRF 6	XRF 7	XRF 8	XRF 9	XRF 10	XRF 11	XRF 12	XRF 13	XRF 14	XRF 15	XRF 16
Arsenic	7.4	0	0	0	0	0	0	0	0	0	0	0	589.6	0
Lead	71.1	132.7	225.2	103.7	101.4	351.6	494.8	460.8	478.4	208	1209.6	1229.6	5939.2	1409.6
Copper	28.9	0	0	0	0	0	0	0	0	0	476.4	1140	1748.8	1389.6
Iron	17607	11795.2	13798.4	10297.6	7520	9504	16000	12198.4	18393.6	5840	18598.4	23398.4	27596.8	12896
Manganese	742	0	1349.6	0	3200	0	0	0	0	0	0	0	0	0
Zinc	137.9	242.8	306.6	194.5	638	379	815.6	590.8	525.2	177.5	2400	2969.6	3440	3648

Three times background are highlighted.

ATTACHMENT A

PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer: Lance Range / EPS (Name/Title) — 8/30/06 (Date)

1021 N. Grand Ave East (Address) — 217-524-1601 (Phone)

lance.range@epa.state.il.us (E-mail Address)

Site Name: Loewenthal Metals

Previous Names (if any): 947 West Cullerton Street

Site Location: Chicago IL

Latitude: N 41° 51' 18.35" **Longitude:** W 87° 39' 0.67"

Complete the following checklist. If Ayes≅ is marked, please explain below.	YES	NO
1. Does the site already appear in CERCLIS?	~	X
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	~	X
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	~	X
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	~	X
5. Is some other program actively involved with the site (Federal, VCP, State, or Tribal)?	~	X
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	~	X
7. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e, deferred to RCRA Corrective Action, FIFRA, or Brownfields)?	~	X
8. Is there insufficient data (provided by the State) to verify that a release has occurred or has the potential to occur (i.e., based on potentially unreliable sources or with no information to support the presence of hazardous substances or CERCLA eligible pollutants and contaminants)?	~	X
9. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (i.e., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, previous HRS score determined, EPA approved risk assessment completed)?	X	~

Please explain all yes answer(s), attach additional sheets if necessary: Based on the X-Ray Fluorescence results collected in July 2006 there are elevated inorganics but not in sufficient quantities to warrant a HRS above 28.5.

Site Determination: ~ Yes Enter the site into CERCLIS. Further assessment is recommended (explain below).

(~ No) The site is not recommended for placement into CERCLIS (explain below).

DECISION/DISCUSSION/RATIONALE:
Upon Review of the XRF data and the resulting area suspected of being contaminated with inorganics, the resulting Quickscore value does not exceed 28.5. Due to the low score of the site, it is recommended that the site not be added to CERCLIS.

Regional EPA Reviewer: Lance Range — Print Name/Signature — 9/30/06 — Date

State Agency/Tribe: LAURA Ripley Laura G. Ripley — Print Name/Signature — 09/27/2006 — Date

ATTACHMENT 1

MAPS OF THE AREA

Figure 1 Site Location Map

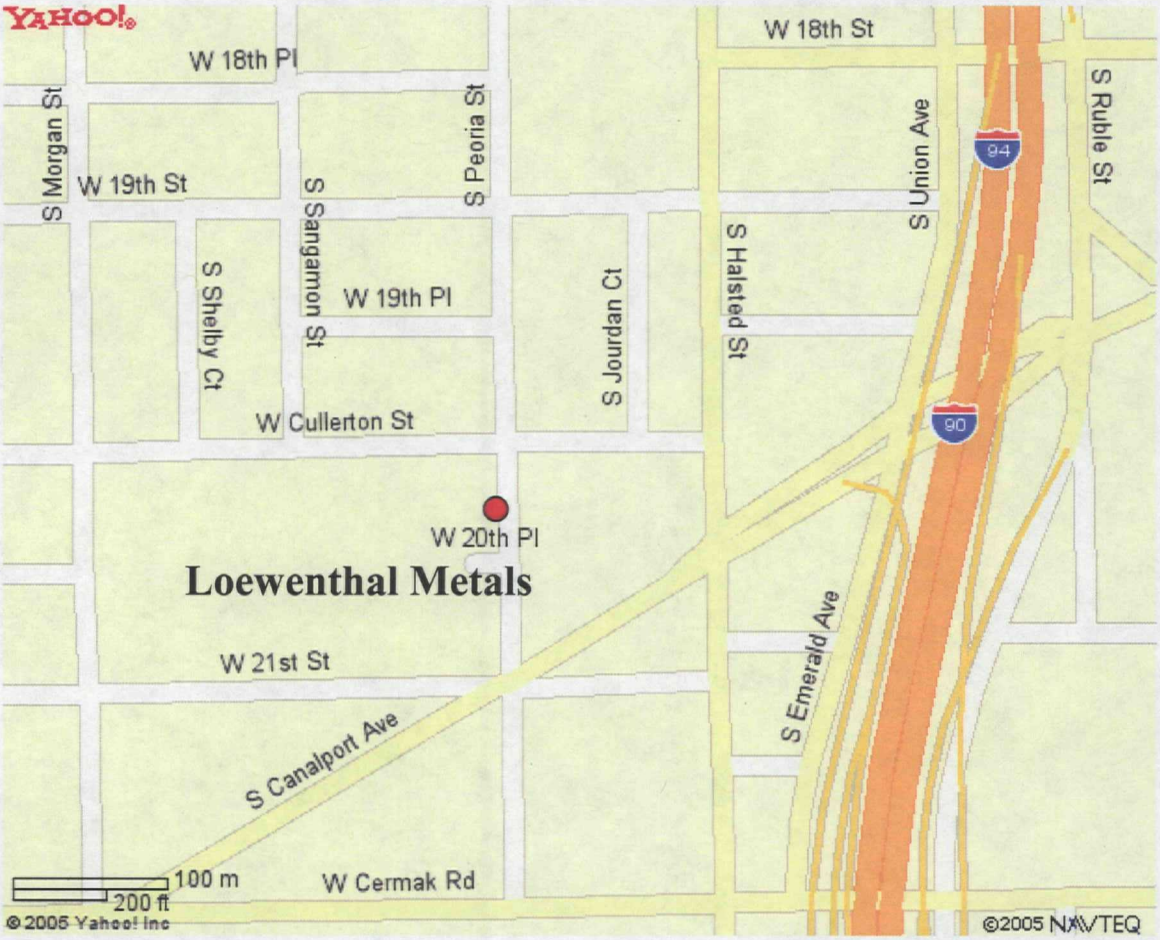
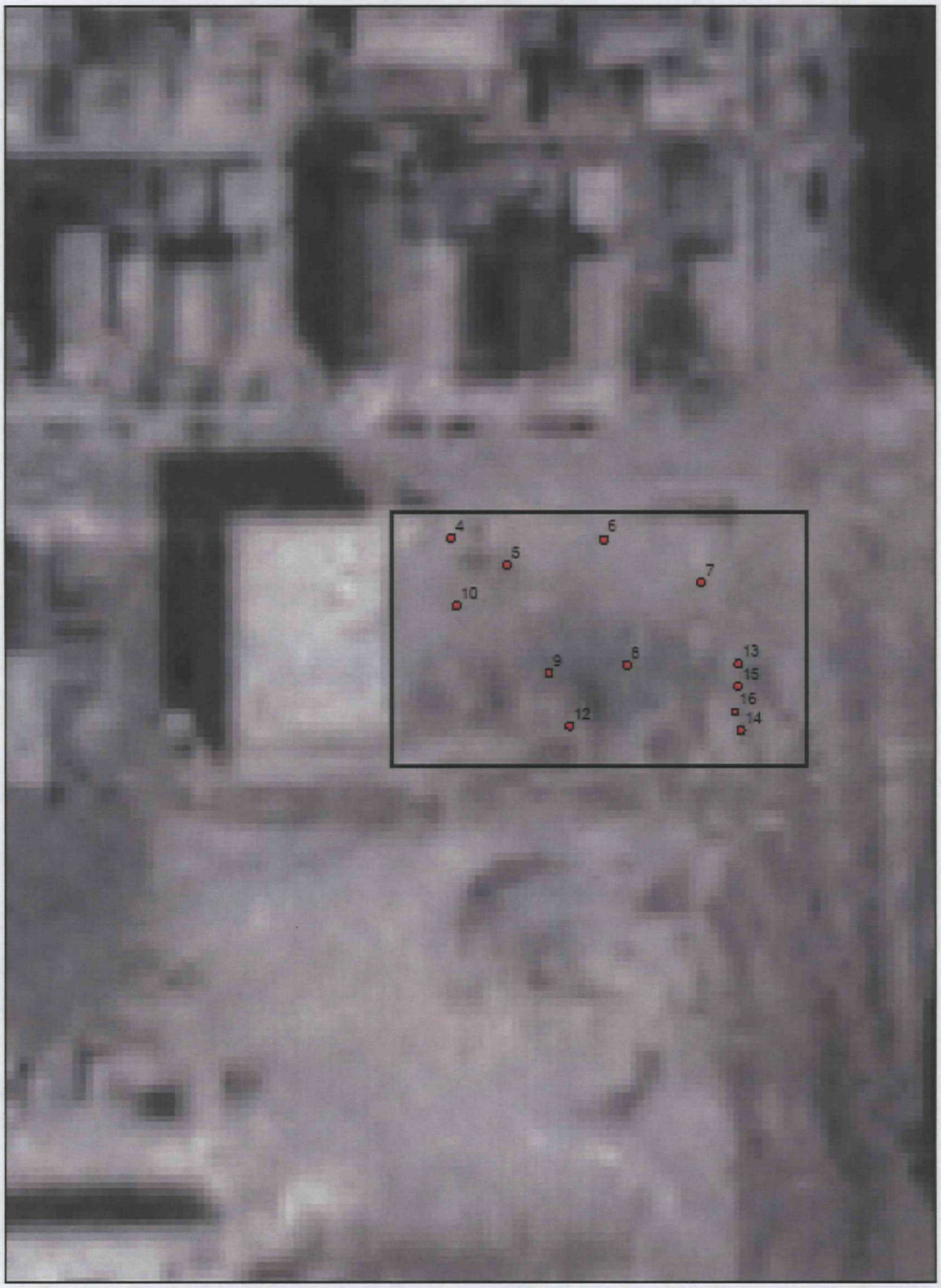


Figure 2
XRF Locations



Recent Photos of Site

Site Name: Loewenthal Metals Corp.	**County:** Cook
ILD:	

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 1
Direction of Photo: West
Comments: Photo taken of vacant lot where former smelter used to be. As can be seen, lot is unvegetated and used for parking/possibly for pick up ball games. Low Rent housing in the background.

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 2
Direction of Photo: South
Comments: Photo taken from middle of lot. There is a concrete structure present at the back of the lot. Railroad tracks are present in the trees also.

Recent Photos of Site

Site Name: Loewenthal Metals Corp.	**County:** Cook
ILD:	

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 3
Direction of Photo: SE
Comments: Photo taken from vacant lot, looking down the railroad tracks. Industrial complexes in the area.

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 4
Direction of Photo: East
Comments: Photo taken from the lot looking east. Beyond the RR tracks are residential homes and a school on the far corner. Many people walking on the site (no sidewalk) to and from school.

Recent Photos of Site

Site Name: Loewenthal Metals Corp.	**County:** Cook
ILD:	

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 5
Direction of Photo: SW
Comments: Photo taken of building across the street. Unsure as to what this building is used for. But the building looks taken care of.

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 6
Direction of Photo: North
Comments: Photo taken from Cullerton looking north. Residential and industrial complexes present.

Recent Photos of Site

Site Name: Loewenthal Metals Corp.	**County:** Cook
ILD:	

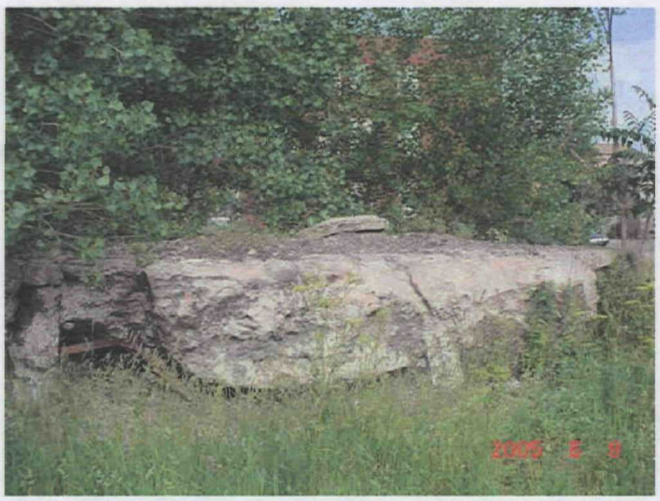
Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 7
Direction of Photo: SW
Comments: Photo taken of residential properties located across the street from the former smelter.

Date: 6/9/05
Time: 9:15 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 8
Direction of Photo: West
Comments: Photo taken of more residential buildings further down the street from the former smelter.

Recent Photos of Site

Site Name: Loewenthal Metals Corp.	**County:** Cook
ILD:	

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 9
Direction of Photo: west
Comments: Photo taken of the concrete platform located near the southern portion of the site. It is unclear if this structure was from the smelter or if some other type of building used for railroad purposes.



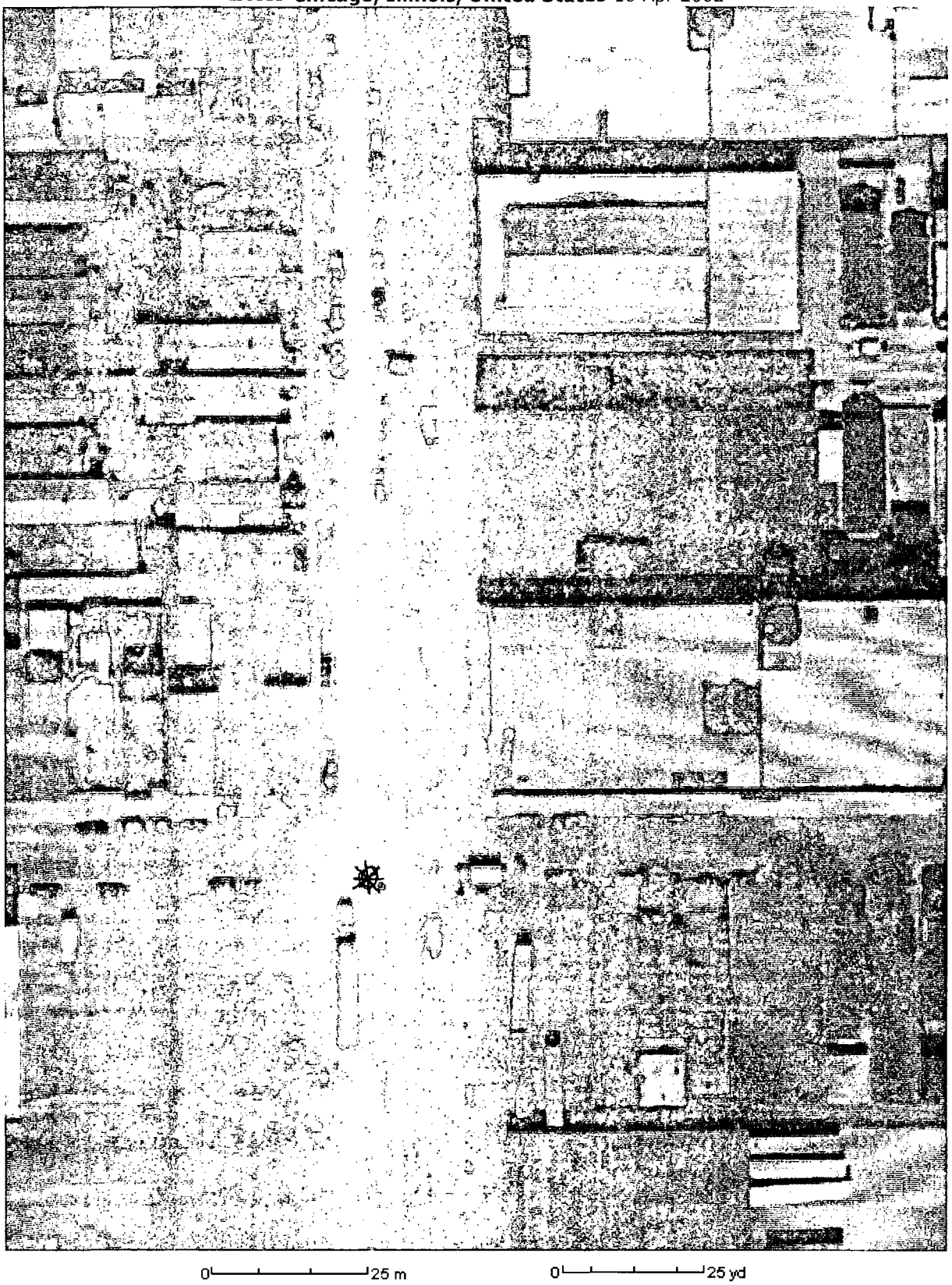
Date: 6/9/05
Time: 9:15 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 10
Direction of Photo: South
Comments: Photo taken of the concrete platform. As you can see there is a dumping problem also in this area.

Recent Photos of Site

Site Name: Loewenthal Metals Corp.	**County:** Cook
ILD:	

Date: 6/9/05
Time: 9:00 AM
Photo Taken By: Lance L. Range
Roll No. NA
Photo No. 11
Direction of Photo: South
Comments: Photo taken of the sign warning of parking onsite. Contact number for the towing company.

USGS **Chicago, Illinois, United States** 10 Apr 2002



947 W. Cullerton St. Chicago, IL 60608-3460 IL04

Longitude: -87.64966 Latitude: 41.85562